# Welcome

Greetings from organizing committee.

It is with great pleasure to invite you to the First Symposium on Harmony Search Algorithm, which is held during February 13~14th of 2014 at Anam campus of Korea University in Seoul, South Korea. This gathering will be an excellent opportunity to introduce various aspects of Harmony Search Algorithm to graduate students as well as professors in various disciplines. Further, this will also become a showcase of the research capabilities of teams and can bring ideas for future collaborations among them.

Since the Harmony Search Algorithm (HSA or HS) was first introduced in 2001, it has been widely used in various research areas. As many other meta-heuristic optimization algorithms like Genetic Algorithm (GA) and Particle Swarm Optimization (PSO), there have been efforts to make the HS even more efficient for specific types of problem. In the beginning, the application of HS was limited to the area of civil engineering, but later, to broad areas of engineering. Self-adaptive and/or parameter setting free versions of HS were developed in an effort to avoid the providing initial values for internal parameters.

In this symposium, recent applications of the algorithm will be presented. I expect very interesting presentations followed by in depth discussion, so that all the participants can obtain the recent trend of the Harmony Search as well as the advanced aspects of the algorithm. We once again welcome you all to this symposium gathering and hope you will have great time while staying in Seoul.

**Joong Hoon Kim**
On behalf of organizing team

# Symposium Schedules

| Feb. 13th | Presentation Schedules |
|---|---|
| 09:00 - 09:20 | **Welcome and Introduction** |
| 09:20 - 10:20 | *"Harmony Search: Past, Present & Future"* <br> By Zong Woo Geem (Gachon University, KOREA) |
| 10:20 - 10:50 | **Coffee Break** |
| 10:50 - 11:40 | *"Analysis of Harmony Search and Other Metaheuristic Algorithms"* <br> By Xin-She Yang (University of Cambridge, ENGLAND) |
| 11:40 - 12:30 | *"The Story of Sisyphus: Harmony Search Algorithm Promoting Engineering Optimization"* <br> By Ioannis Kougias <br> (Institute for Energy and Transport, EUROPEAN COMMISSION) |
| 12:30 - 14:00 | **Lunch** |
| 14:00 - 14:50 | *"Groundwater Applications of Harmony Search"* <br> By Mustafa T. Ayvaz (Pamukkale University, TURKEY) |
| 14:50 - 15:40 | *"Recently Developed Metaheuristic Optimizers and Their Applications in Water and Civil Engineering"* <br> By Ali Sadollah (Korea University, KOREA) |
| 15:40 - 16:10 | **Coffee Break** |
| 16:10 - 17:00 | *"Recent Applications of Harmony Search to Urban Road Network Planning, Indoor Localization and Telecommunications"* <br> By Javier Del Ser Lorente (Tecnalia Research & Innovation, SPAIN) |
| 17:00 - 18:00 | *"Improving the Global and Local Search Capability of Harmony Search* <br> By Joong Hoon Kim (Korea University, KOREA) |
| 19:00 - 21:00 | **Dinner** |

❖ *Each timeslot includes time for discussions, questions, and answers.*

| Feb. 14th | Discussion & Field Trip |
|---|---|
| 09:00 - 09:30 | **Coffee Break** |
| 09:30 - 11:30 | Discussion on how to manage regular meetings for the algorithm user group |
| 12:00 - 13:30 | **Lunch** |
| 13:30 - 18:00 | Field Trip |
| 18:00 - 20:00 | **Dinner** |